

Claims

1. A power tool, in particular a handheld electric power tool, having a housing
5 (10) with a coolant duct arrangement, having through openings (14), for a cooling
medium for cooling at least one motor located in the housing (10), wherein the
through openings (14) each have cross- sectional areas in the range from 0.15
mm² to 10 mm².
- 10 2. The power tool according to claim 1,
wherein the through openings (14) are provided at at least one coolant outlet.
3. The power tool according to claim 1 or 2,
wherein the through openings (14) are located in a plate which is joined to the
15 housing (10).
4. The power tool according to one of the foregoing claims,
wherein the through openings (14) have a depth which is equivalent to at least
one crosswise length of the through openings (14).
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5. The power tool according to one of the foregoing claims,
wherein the through openings (14) are embodied as round.
6. The power tool according to one of the foregoing claims,
25 wherein elements (20) in a flow path inside the housing (10) are provided with
rounded edges and/or are embedded in at least some regions in a casting
composition (34).
7. A coolant duct arrangement having through openings (14) for a coolant, in
30 particular for a power tool,
wherein the through openings (14) each have cross- sectional areas in the
range from 0.15 mm² to 10 mm².
8. The coolant duct arrangement according to claim 7,

wherein the through openings (14) have a perforation structure (18), with through openings (14) located in columns (24) and rows (26).

9. The coolant duct arrangement according to claim 7 or 8,
5 wherein the through openings (14) have a depth which is equivalent to at least one crosswise length of the through openings (14).

10. The coolant duct arrangement according to one of claims 7 through 9,
10 wherein a rib width between two through openings (14) closest to one another is equivalent at most to one crosswise length of the through openings (14).

11. The coolant duct arrangement according to one of claims 7 through 10,
15 wherein the through openings (14) are located in columns (24) and/or rows (26) of equal rib width.

12. The coolant duct arrangement according to one of claims 8 through 11,
wherein the through openings (14) are combined in groups (28), which are spaced apart substantially equally in columns and/or in rows.

20 13. The coolant duct arrangement according to claim 12,
wherein the through openings (14) within the groups (28) have different diameters and/or rib widths.

25 14. The coolant duct arrangement according to one of claims 7 through 13,
wherein the through openings (14) are embodied substantially cylindrically.